

III. SCOPE OF WILDLAND FIRE MANAGEMENT PROGRAM

A. GENERAL MANAGEMENT CONSIDERATIONS

The Northwest Colorado Fire Management Program area fire management plan strives toward consistency across boundaries with all cooperating agencies and provides wildland fire guidance and direction that will allow for a full range of fire management practices from least constrained fire use to full and immediate suppression. The plan will also provide local governments the support and guidance necessary to address wildland fire management issues jointly with Federal agencies. Specific agency affiliation within this structure is important only in terms of budget.

This plan has three main purposes:

- ❑ To guide the decision-making process of evaluating and responding to fires in the NWCFMP area.
- ❑ To lay the foundation for fuels management projects and activities in the NWCFMP area.
- ❑ To provide an interagency platform for Federal fire management and planning that allows agencies to cooperate more fully across jurisdictional boundaries.

The Plan provides direction to comply with the current National Fire Plan guidance and achieve land management goals and objectives identified in Land Use and other planning documents. Federal Wildland Fire Management Policy directs Federal agencies to achieve a balance between suppression to protect life, property, and resources, and fire use to regulate fuels and maintain healthy ecosystems. To that end, wildland fire will be managed using the following criteria:

- ❑ **Wildland Fire Suppression** - All unwanted wildland fires will be suppressed. Suppression actions will continue to be accomplished using the appropriate management strategy for each incident. Protection priorities will be addressed in Section IV. The full range of wildland fire management strategies may be used within fire management units B, C, and D (See Table 2, p. 17). Use of these strategies will conform to current national and agency policy requirements.
- ❑ **Wildland Fire Use** - Wildland fire use allows fire managers to take advantage of the latest fire policy by allowing agency resource objectives to be achieved through the use or management of a wildland fire. The full spectrum of management responses is available, from actively suppressing the fire due to values to be protected to monitoring the fire while allowing it to play its natural role within the ecosystem.
- ❑ **Prescribed Fire** - Prescribed fire will continue to be used within FMUs B, C, and D to meet identified resource management or hazard fuel reduction objectives. Use of prescribed fire will be guided by agency planning documents and consultation with appropriate agency staff.
- ❑ **Non-Fire Application** - Mechanical treatments may be performed as needed within the FMUs in areas not designated as wilderness or potential wilderness or similarly restricted (i.e. Heritage sites). The primary purpose of these treatments is to achieve hazard fuel reduction in those locations where the use of prescribed fire is not feasible.

The primary goal of this document is to provide for firefighter and public safety, protect public and private property, heritage and natural resource values. Bureau policy and the Wildland Fire Policy and Program Review direct an agency administrator to use the appropriate management strategy concept when selecting specific actions to implement protection and fire use objectives. This plan identifies criteria that will help determine the appropriate management response for all fire starts on public lands in the planning area. The safety of firefighter personnel and equipment and the public will remain the primary consideration when determining the appropriate management response. Other items considered are resource management objectives, the natural role of fire in the ecosystem, long and short seasonal drying trends, observed burning potential, daily weather predictions, burning indices for each fire, fire suppression costs and net value change, including the loss of private property.

This plan recognizes that sound risk management is a foundation for all fire management activities and will address other guiding principle identified in Wildland and Prescribed Fire Policy listed below that are fundamental to the success of the program:

- ❑ Firefighter and public safety is the first priority in every fire management activity.
- ❑ The use of wildland fire is necessary to restore and/or sustain ecosystem health.
- ❑ Fire management goals will tier off approved land use plans and will conform to applicable Federal and State laws and regulations and be consistent with policy.
- ❑ Actions taken will be cost effective.
- ❑ Federal, Tribal, State, and local interagency coordination and cooperation are essential. Fire management planning, preparedness, prevention, suppression, fire use, restoration and rehabilitation, monitoring, research, and education will be conducted on an interagency basis with the involvement of cooperators and partners.
- ❑ This fire management plan, operational plans, and other fire management related programs will be based on a foundation of sound science. Research will support ongoing efforts to increase our scientific knowledge of biological, physical, and sociological factors. Information needed to support fire management will be developed through an integrated interagency fire science program. Scientific results must be made available to managers in a timely manner to be used in the development of future land management plans, fire management plans, and implementation plans.

B. WILDLAND FIRE MANAGEMENT GOALS

The fire management goals identified in Appendix B, p. B-1 through B-175, of this plan for the public lands administered by all cooperating agencies have been incorporated into the following wildland fire management goals:

- ❑ **Goal: Safety/Health** – Maintain levels of readiness, initiate and complete actions to effectively manage all unplanned wildland fire ignitions in a manner that provides for the safety and health of employees and the public in compliance with all Departmental and agency policies and cooperative agreements.
- ❑ **Goal: Natural Fire** – Establish and maintain a program for the use of naturally occurring fire (Wildland Fire Use), in accordance with Departmental and agency

policy and scientifically based parameters, that maximizes opportunity for fires to run their natural course, managed only as necessary to address health and safety issues and protect life, property, and other values at risk.

- ❑ **Goal: Restoration/Maintenance** – Initiate prudent fire management actions, in concert with resource management planning, and a system of fire effects monitoring and analysis, to restore and maintain natural biodiversity.
- ❑ **Goal: Endangered Species/Heritage Sites/Wilderness Values** – Minimize impacts of wildland fires and suppression actions to threatened and endangered species, wilderness values and heritage sites while continuing to minimize human interference with the natural role of fire. Use prescribed fire to protect, maintain, and restore critical species habitat, heritage sites, and wilderness values.
- ❑ **Goal: Staffing/Equipment** – Obtain and maintain the necessary staffing and equipment, in accordance with NWCG standards and agency policy, to manage wildland and prescribed fires to meet resource management goals and to safely provide protection to health, life and property.
- ❑ **Goal: Cooperative Efforts** – Continue to implement cooperative management efforts and agreements with State, local and other Federal agencies to provide efficient, cost effective, fire management activities, which mitigate wildland fire risks and meet resource management needs.
- ❑ **Goal: Fire Education** – Provide educational opportunities for agency personnel, cooperators, other government agencies, and the public regarding the natural role of fire and fire management and prevention.
- ❑ **Goal: Monitoring** – Monitor fire effects, environmental conditions, and fire behavior to insure management and fire incident objectives are met.

The purpose of this plan is also to achieve the goals put forth in the 10-Year Comprehensive Strategy, the Cohesive Strategy, and National Fire Plan, as well as other wildland fire policy. The fire program goals listed above are also designed to achieve additional goals identified in these documents as well.

C. WILDLAND FIRE MANAGEMENT OPTIONS

Fire, as a critical natural process, will be integrated into land and resource management plans and activities on a landscape scale, and across agency boundaries. Response to wildland fires is based on ecological, social and legal consequences of the fire. The circumstances under which a fire occurs, and the likely consequences to firefighter and public safety and welfare, natural and cultural resources, and values to be protected will dictate the appropriate response to the fire.

It is the intention of the agencies working under this plan to manage all wildland fires occurring on public lands within the NWCFMP area using the appropriate management response concept. The full range of fire management activities, including the use of wildland fire, will be used to achieve ecosystem sustainability including its interrelated ecological, economic and social components. *The protection of human life is the single, overriding suppression priority.* Setting protection priorities among human communities and community infrastructure, other property and improvements, and natural and cultural resources will be done based on the values to be protected, human health and safety, and the cost of protection. Once people have been committed to an incident, these human resources become the highest value to be protected.

Wildland fire – both prescribed fire and fire use – will be utilized to protect, maintain, and enhance resources, and, as nearly as possible, be allowed to function in its natural ecological role. Use of fire will be based on guidance included in this FMP and will follow specific prescriptions contained in operational plans.

The basic fire management strategy for the NWCFMP area will be to use the appropriate management response to manage all wildfires commensurate with values at risk. Firefighter and public safety is the first priority and will remain the primary consideration in determining the appropriate management response. Other items considered are resource management objectives, the natural role of fire in the ecosystem, long and short seasonal drying trends, observed burning potential, daily weather predictions, burning indices for each fire, fire suppression costs and net value change, including threats to private property.

All fire management activities will be conducted in accordance with the guidance developed for each polygon (Appendix B), and in a manner consistent with applicable laws, policies, and regulations. The following limits and requirements will apply to all wildland fire responses:

- ❑ The emphasis will be on using minimum impact tactics whenever possible. While fires in A and B category areas may require more aggressive suppression tactics, the emphasis will still be on limited impacts. In C and D category areas, roads and natural barriers will be used where practical. In D category areas that include wilderness, mechanized use will be limited to the level of approval of the responsible Agency Administrator.
- ❑ A Wildland Fire Implementation Plan or Wildland Fire Situation Analysis (WFIP/WFSA) will be completed on any fire that extends beyond the criteria of this plan. Section 7 clearance will be secured where threatened, endangered, and candidate species may be adversely impacted.
- ❑ Aerial retardants and foams will not be used within 300 feet of any waterway as described in the Guidelines for Aerial Delivery of Retardant or Foam near Waterways.
- ❑ Rehabilitation and restoration efforts will be undertaken to protect and sustain ecosystems, public health, safety, and to help communities protect infrastructure.

D. DESCRIPTION OF WILDLAND FIRE MANAGEMENT STRATEGIES BY FIRE MANAGEMENT UNIT

1. FMU Description

Location: The NWCFMP area is located in the Northwest one fifth of the State of Colorado from the continental divide west to the Utah border and from the I-70 corridor north to the Wyoming border. The area encompasses approximately 7.0 million acres distributed across five Colorado counties: Rio Blanco, Moffat, Routt, Jackson, and Grand. (Figure1, Appendix A). The NWCFMP administers a total of 3,162,890 acres of Federal agency lands comprised of the Little Snake, Kremmling and the White River Field Offices. In addition, the NWCFMP maintains cooperative agreements with State and local governments and has initial fire response obligations for approximately 3,613,400 acres of State and private lands.

In addition to the BLM, Browns Park National Wildlife Refuge (USFWS), Dinosaur National Monument (NPS) and Arapaho National Wildlife Refuge (USFWS) also own and manage lands within the NWCFFMP area and, by agreement, jointly manage wildland fire activities through an inter-agency platform located at the NWCFFMP center. Total land ownership for the planning area is indicated in Table 1.

** Note: Beginning in 2008, the Routt NF will operate under a Fire Management Plan separate from the NW Colorado Fire Management Plan. Some basic, historical information pertinent to the Routt NF will remain in this plan.

Table 1: Land Ownership – Northwest Colorado Fire Management Program Area

Owner/Land Manager	Acres
Bureau of Land Management (BLM)	3,162,890
Private	3,115,000
State of Colorado (State)	339,212
Colorado Division of Wildlife (CDOW)	158,992
National Park Service (NPS)	152,447
U.S. Fish and Wildlife Service (USFWS)	35,573
Other	915
Total	6,964,330

Source: GIS Library - September 2004

Interdisciplinary teams of specialist from the BLM Field Offices, in consultation with specialists from the U.S. Fish and Wildlife Service established resource and fire management objectives for all BLM and U.S. Fish and Wildlife Service lands in the NWCFFMP area. The process used to complete the Forest Plan for the Routt National Forest generated units that corresponded to those identified by the BLM. The NWCFFMP area was divided into units that tended to share common natural disturbance patterns based on fire history data and physical features such as land forms and fuel types (i.e. ponderosa pine forest, sage – grassland complex). Areas of concern and limitations for fire management activities were identified, including where wildland fire might be desired. The areas where use of wildland fire may be desirable were further analyzed to determine where the threat to private property and life would preclude the use of wildland fire, such as in wildland-urban interface areas. Developed sites, such as recreational and cultural sites where any type of fire was not desired were also identified.

Through this process four unique fire management units (FMU) or polygons defined by resource and fire management objectives, constraints, and values to be protected were identified within the NWCFFMP area. The strategies, outlined below, are incorporated in the Fire Management Plan and provide for Appropriate Management Response from full suppression to fire use through the four FMU's/Polygons.

- **DIRECT CONTROL** - Strategy employed in an appropriate management response where a fire perimeter is managed as much as possible by direct actions. This strategy correlates to suppression-oriented response.
- **PERIMETER CONTROL** - Strategy employed in an appropriate management response that seeks to confine a fire by a combination of direct and indirect actions. Fires beneficial effects may be realized. This strategy relates to suppression-orientated response through wildland fire use bridging the gap between the two responses.

- **PRESCRIPTION CONTROL** - Strategy employed in an appropriate management response where a fire is managed by prescription criteria, whether geographic boundaries or predetermined burning properties as outlined in the Implementation Plan. This strategy relates to wildland fire use as portrayed in this Implementation Plan.

These strategies have been categorized into A, B, C or D FMU'S/Polygons and associated objective tables, representing a continuum of Appropriate Management Responses from full suppression in A polygons, through Wildland Fire Use in D polygons. The prescriptive criteria in this plan and Relative Risk Assessment Process will guide managers in determining appropriate responses in fire use situations.

Table 2: Fire Management Units – NWCFMP

Fire Management Unit	Appropriate Management Response Strategy	Fire Use
A: Wildfire and prescribed fire not desired.	Full Suppression response utilizing Direct Strategy.	No
B: Wildfire not desired due to social, political and resource value protection. Prescribed fire desired.	Suppression oriented response utilizing Direct or Perimeter Strategy. Prescribed fire used to reduce fuels and to maintain ecosystem health.	No
C : Wildland fire desired but some constraints limit fire use potential. Limited prescription.	Conditional response utilizing Direct, Perimeter or Prescription Strategy.	Yes, limited prescription
D : Wildland fire desired with few constraints to limit fire use.	Unconditional response with emphasis on Prescription Strategy	Yes

In most cases, the FMUs may have in common fuel types, major fire regime groups, and topography. It is also possible they cross political boundaries. Therefore, characteristics will be described in general for the entire NWCFMP area. The four FMUs represented within the boundaries of the NWCFMP area illustrate a wide range of ecosystems, and variety of fire management challenges and opportunities. Alternatives vary from aggressive protection of resources or values to ecosystem sustainability by fire utilization.

Landscape Characteristics

The delineations known as Landscape Units (LU) have been adopted from the U.S. Forest Services' draft map, Ecological Sub-sections of the Rocky Mountain Region. These LUs are tracts of land where the various biotic and abiotic characteristics (climate, physiography, soils, vegetations, wildlife, water, etc.) are similar and are displayed to provide overall information of the unit as a whole.

1. Uinta Mountains

A very small portion of this LU is located in the extreme western portion of the NWCFMP area. Elevations range from 5,200 to 8,600 feet. Mountains are an anticlinal uplift with an east-west orientation. At higher elevations, periglacial and glacial processes shape landforms through freezing and thawing. At lower elevations, erosion by water and wind are active land forming processes. Vegetation consists of (from higher to lower) alpine tundra, Engelmann spruce,

spruce-fir, lodgepole pine, subalpine meadow, Douglas-fir, ponderosa pine, aspen, mountain big sagebrush, oak and mountain brush, and pinyon-juniper. Annual precipitation ranges from 8 to 35 inches annually.

2. *Green River Basin*

This LU is located in the western portion of the NWCFMP area and is one of the largest landscape units within the area. Elevations range from 5,300 to almost 9,500 feet. Alluvial fans, piedmont plains and slopes from the surrounding mountains join to form broad intermountain basins. Vegetation consists of grasses to grass-shrub to forests. Potential vegetation is sagebrush steppe (sagebrush-wheatgrass), saltbush-greasewood, wheatgrass, needle grass, and shrub steppe.

3. *North Central Highlands and Rocky Mountains*

This LU is located in the central third of the NWCFMP area. Elevations range from about 4,800 to 12,800 feet. The area is made up of steeply sloping to precipitous flat-topped mountains dissected by narrow steep gradients and stream valleys. High plateaus have steep walled canyons. There are gently rolling mountain parks, mountain ridges, and foothills. Vegetation consists of western spruce-fir forest, pine-Douglas-fir forest, pinyon-juniper woodland, mountain mahogany-oak scrub, and sagebrush. At lower elevations, there are pinyon pine, shrubs, grass, and shrub-grass vegetation. Precipitation ranges from 7 to 45 inches annually.

4. *Northern Parks and Park Ranges*

This LU is located in the eastern portion of the NWCFMP area. The landscape is steeply sloping to precipitous mountains dissected by many narrow stream valleys with steep gradients. Parts are gently rolling mountain parks and valleys, with some mountain ridges. Elevations range from nearly 5,300 to over 14,000 feet. Vegetation consists of alpine meadows and barren, fescue-mountain muhly prairie, sagebrush steppe, pinyon-juniper woodland, and Great Basin sagebrush. Precipitation ranges from 5 to 50 inches annually.

Fire History

1. *Historic Role of Fire and Fire Ecology*

A wide variety of vegetative mix exists throughout the range of the landscape that encompasses the NWCFMP area. Throughout this range, recent and past disturbance activities have created an evolution of ecosystem qualities that vary through space and time. The following generalizations can be made, based on research by Romme and others in western Colorado.

2. *Spruce/Fir Forests*

Fire intervals in spruce/fir forests are variable ranging from decades to hundreds of years, with the longer intervals being more typical. Due to the long fire return interval, wildland fire suppression activities in this vegetation type have not significantly changed the composition, structure, and function of these forests.

3. *Ponderosa Pine Forests*

Historically, low-intensity fire was relatively frequent in ponderosa pine forests, with natural fire return intervals of about 10-20 years. These fires played a major role in shaping the composition, structure and function of these forests, and had a big effect on the abundance and distribution of overstory and understory plant species. The periodic low-intensity ground fire naturally thinned the vegetation and kept understory species in check. Timber harvest, fire suppression, and livestock grazing activities have had a significant impact on the composition, structure, and the function of these forests.

4. *Mixed-Conifer Forests*

The naturally cool, moist environment of these forests makes them relatively fire resistant, but under very dry conditions, fire is usually of high intensity due to the naturally high density of trees and the high fuel loading found on the forest floor. Historically, median fire return intervals in the warm, dry mixed-conifer forest were about 20-30 years and fire played a similar role to that described for the ponderosa pine forests. The current condition of many of the warm, dry mixed-conifer forests is also similar to that described for ponderosa pine forests, since past timber harvest, fire suppression, and livestock grazing activities have had similar effects. Timber harvest of old growth ponderosa pine and Douglas fir has changed the abundance and distribution of these species, and has created opportunities for white fir to become more dominant.

5. *Aspen Forests*

Current fire research on the aspen forests in the southwestern part of Colorado indicates historical mean fire intervals of 18 to 48 years. Other studies indicate that there remains a lot of uncertainty about fire intervals and fire intensities of aspen forests. The naturally cool, moist environment associated with these forests makes them relatively fire resistant; so most fires quickly die out. Under very dry conditions, high-intensity fires occur, particularly in stands with high amounts of ground fuels and a heavy conifer component.

6. *Pinyon/Juniper Woodlands*

Infrequent, light surface fires characterize Pinyon/juniper woodlands with fire return intervals greater than 25 years. Unpublished research of pinyon/juniper sites in Mesa Verde National Park located in Southwest Colorado indicates long fire return intervals for stand-replacing events, and indicates that when these events occur the fires tend to be large and very intense.

7. *Mountain Shrublands*

Fire history and effects in closed-canopy oak shrublands are speculative since fires rarely leave visible evidence (fire scars). Given that the area has an annual period of hot, dry weather; that an abundance of ignition sources exists in these shrublands; and that frequent fires occur in adjacent communities, it seems unlikely that fires were rare. Gamble oak and other brush species will sprout from root collars after a stand-replacing event.

Fuel Characteristics and Expected Fire Behavior

The NWCFMP area supports a variety of fuel types, including grass, sage, sage/grass, pinyon/juniper, oak-brush/grass, ponderosa pine, and mixed-conifer. The following table represents best available information on fuels complexes within the NWCFMP area and expected fire behavior during the fire season.

Table 3: Fuel Characteristics/Expected Fire Behavior

Condition	Fuel Model	Flame Length <i>feet</i>	Rate of Spread <i>Ch/hr</i>	Characteristics
Normal	1	4.0	78	Even under conditions of light winds and reduced, flames can move quickly through this fuel type.
Extreme	1	8.0	311	Under windy conditions when fuel moistures and humidity are low, rapid rates of spread can be expected.
Normal	2	6.0	35	May include clumps of fuel that generate higher intensities and may produce firebrands. Fire intensities can lead to short-range spotting and torching of individual trees that can make control difficult.
Extreme	2	16.0	240	Fires exceed the upper limit of control by direct attack. Torching and long-range spotting are very likely.
Normal	6	6.0	32	Fires being pushed by moderate winds (8mph) carry through the shrub layer where the foliage is more flammable than FM5. Will drop to the ground under low wind speeds or at openings in the stands.
Extreme	6	11.0	111	Fires exceed the ability to control by direct attack under windy, dry conditions. Spotting can lead to escaped fires.
Normal	8	1.0	1.6	Fires in this fuel type tend to be slow moving ground fires with low flame lengths. Heavy concentrations of fuel may flare up.
Extreme	8	2.2	5.0	Under periods of severe weather involving high temperatures, low humidity, and high winds fires can exhibit fire behavior, including rapid moving ground fire, total duff consumption, and possible torching and crown fires.
Normal	9	2.6	7.5	Fires occurring in this fuel type tend to exhibit a moderate rate of spread. Intensities will increase as fire enters brushy areas that support leaves or draped pine needles.
Extreme	9	5.1	28	Rates of spread often increase when winds are higher due to spotting caused by rolling and burning leaves. Torching, spotting, and crown fires may be encountered during drought conditions.

Source: Aids to Determining Fuel Models for Estimating Fire Behavior (Anderson 1982), and BEHAVE (Andrews 1986)

Fire Weather

The climate and topography vary greatly over the NWCFMP area. The west end of the area is characterized as a semi-arid plateau, and as one moves to the east, the landform rises dramatically through several climate zones.

Three major summer weather features influence fire behavior in Northwest Colorado: monsoons, northern cold fronts and subsidence inversions. The annual presence of the monsoon flow creates both the source of fire ignition as well as the moisture that limits fire activity. The plateau receives numerous dry lightning storms. This lightning belt is the second most active fire producing area in the United States. More rainfall hits the ground as the landform rises upward toward the cloud base. As a result, fire occurrence drops off rapidly with the gain in elevation and the increase in precipitation. The monsoon begins in late May or early June and produces isolated occurrence of thunderstorms. The true monsoon sets up around the Fourth of July with numerous daily thunderstorms with many of the storms producing little precipitation at the lower elevations. By the third week in July the lower atmosphere usually saturates more quickly with each monsoonal cycle and the storms become wetter. The monsoonal influence abates in early August. With the abatement of the monsoon in August, the fuels at all elevations peak in terms of curing. It is at this point and throughout the fall the higher elevation areas have the greatest probability of large fires.

The second weather feature of influence is the northern cold fronts that usually clip the northern half of the FMP. The majority of the large fires at all elevations within the zone occur with the passage of northern cold fronts. Lightning levels are usually lower than with the monsoon, but cloud cover and higher humidity are of short duration, with a quick return to hotter and drier conditions following the event. Fire activity is often accelerated by the winds associated with the frontal passage.

The third weather feature is the occurrence of subsidence inversions that set up over the inter-mountain/Great Basin area. This event usually first occurs in June and marks the transition from spring to summer weather patterns. Rapid curing of annual grasses and drying of large dead and down fuels takes place at this time and sets the stage for the lightning events of the monsoon and cold fronts that follow. These weather phenomena may occur throughout the summer and early fall and are often followed by lightning events that start fires in the very dry fuels.

The typical period for lightning to occur is June through August, with most lightning subsiding by the end of August. Typical summer temperatures range from 70 to 90 degrees for the highs and 45 to 65 for the lows. Mean annual precipitation ranges from 5 inches in the drier western portion of the NWCFMP area to 40+ inches in the higher mountainous areas.

Fire Season

The fire season generally begins in May and continues through September. Normally, the earliest reported fires are in late March and the latest occur in mid October. Fire activity peaks in July, which is the mid-point of the primary season, but will vary depending on weather patterns such as late spring and summer thunderstorms activity and precipitation amounts which directly influence fire occurrence and acres burned. Occasionally, the peak periods have started

in the latter part of June and lasted into August. A second peak fire season generally occurs in late August. The primary peak fire season usually lasts from two to four weeks, again depending on the weather.

Figure 2: Fire Occurrence – Routt National Forest – 1994 - 2003

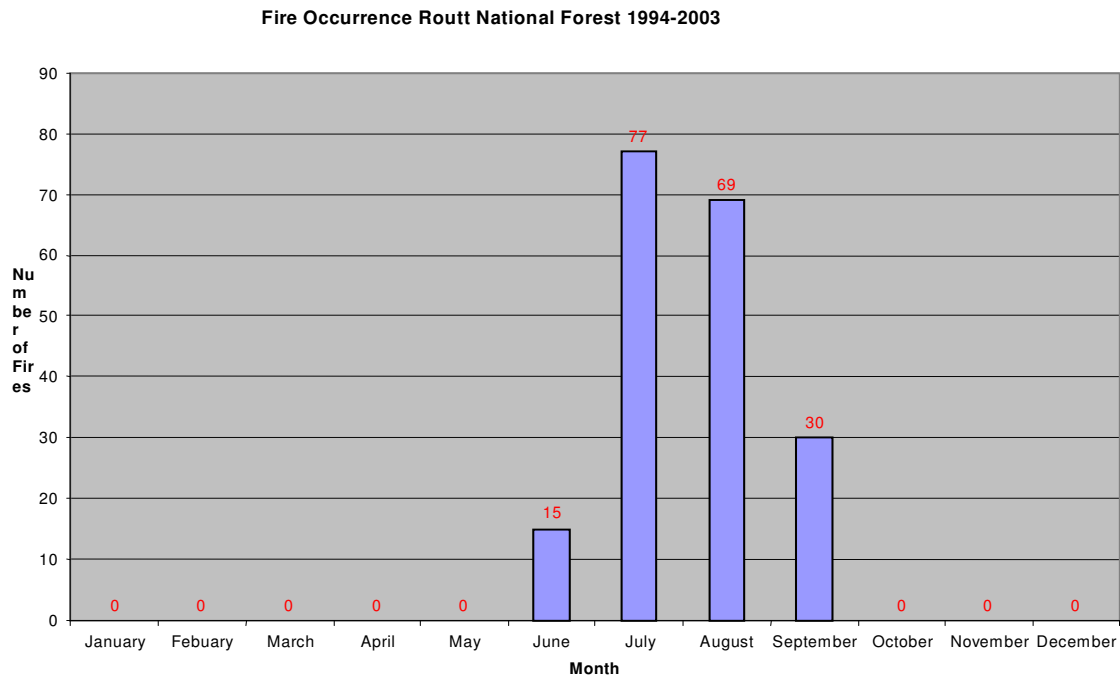
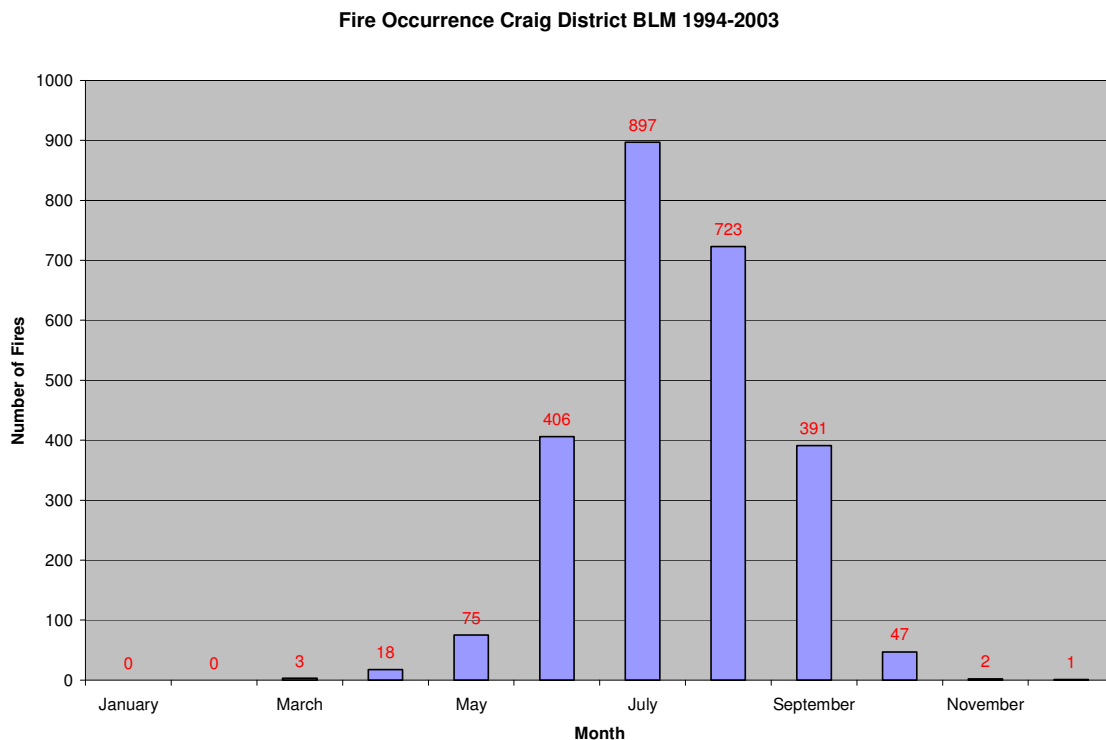


FIGURE 3: Fire Occurrence –BLM - 1994 -



Suppression History

On average, the fires occurring in the NWCFMP area are relatively small; most are held under 100 acres. However, conditions exist in portions of the planning area for large, catastrophic wildfires that can result in the loss of life, property, and resources. For example, continuous, accumulated stands of decadent bitterbrush provided the conditions for a series of large fires in the Sandhills/Crooked Wash Area resulting in the loss of vital deer habitat. In 1989, the “I Do Fire” burned 15,410 acres. In 1993, the “Sunbeam Fire” burned 12,410 acres and the “Wapiti Fire” burned 9,600 acres. In 1996, the “O’Pinion Fire” burned 13,775 acres. Similar conditions in other areas have provided fuel for other large fires. Insect and disease have effected the spruce/fir fuel type on the Routt National Forest and has resulted in recent large fires, including the Burned Ridge fire, 14,403 acres, Hinman fire, 16,852 acres and Green Creek 4,400 acres.

The Kremmling Field Office has by far the lowest average annual fire occurrence rate among the areas within the NWCFMP. Historically, due to elevation and storm patterns, the growing season and moisture available to these sites has produced vegetation that burns at a long fire return interval. Infrequent natural ignitions in combination with fuels that are dry enough to burn and continuous enough to encourage fire spread has contributed to a low number of fires and responses.

Indicated in the table below are the reported wildland fires by cause for the FMUs.

Table 4: Wildland Fire Occurrence by Fire Management Unit – BLM – 1994-2003

FMU	Natural		Human		Numbers		All Causes	
	No.	Acres	No.	Acres	No.	Acres	No.	Acres
A	0	0	0	0	0	0	0	0
B	834	37,641	42	3,364	95	5	876	41,005
C	896	25,701	27	3,487	97	3	923	29,188
D	684	12,553	27	2,189	96	4	711	14,742

Source: GIS Library – September 2004

Table 5: Wildland Fire Occurrence by Fire Management Unit RTF– 1994-2003

FMU	Natural		Human		Numbers		All Causes	
	No.	Acres	No.	Acres	No.	Acres	No.	Acres
A	0	0	0	0	0	0	0	0
B	114	14,905	9	0.9	93	7	123	14,906
C	46	16,944	1	0.1	98	2	47	16,944.1
D	24	11,487	1	0.1	96	4	25	11,487.1

Source: GIS Library – September 2004

Fire Regime/Condition Class

1. Fire Regime

Much of the timbered lands of the NWCFMP area experience long return intervals between fire events. Burn severity in these communities tends to be moderate to severe resulting in stand replacement of the dominant species. Examples of these vegetative types are: high elevation

sub-alpine fir and spruce, lodgepole pine, mid to lower elevation lodgepole pine, and some pinyon/juniper stands in the western portion of the program area. Examples of a more moderate to frequent return interval would be sage/grasslands in the western portion of the NWCFMP area and the lower elevation shrub communities in the eastern zones of the NWCFMP area.

Preliminary fire regimes for the NWCFMP area have been identified and are included in each polygon description in Appendix B. A breakdown of the fire regimes by acres and percent of public land in the NWCFMP area are included in Table 6.

Table 6: Fire Regimes NWCFMP

Fire Regime	Acres	Percent
I	33,430	0.4
II	0	0.0
III	888,041	11.0
IV	5,921,403	72.0
V	1,232,809	15.0
Unclassified	134,346	1.6

Source: GIS Library – September 2004

2. Condition Class

Condition classes are defined in terms of the relative risk of losing one or more key components that define an ecological system based on five ecosystem attributes: disturbance regimes (patterns and frequency of insect, disease, fire, etc.), disturbance agents, smoke production, hydrologic function (sedimentation, stream flow, etc.), and vegetative attributes (composition, structure, and resilience to disturbance agents).

Condition class definitions have been developed and incorporated into the 10-Year Comprehensive Strategy. Explanations of each class are found in Table 8.

Table 7: Condition Class Definitions

Condition Class	Fire Regime Example Management Options
Condition Class 1	Fire regimes are within an historical range and the risk of losing key ecosystem components is low. Vegetation attributes (species composition and structure) are intact and functioning within an historical range. Where appropriate, these areas can be maintained within the historical fire regime by treatments such as fire use.
Condition Class 2	Fire regimes have been moderately altered from their historical range. The risk of losing key ecosystem components is moderate. Fire frequencies have departed from historical frequencies by one or more return intervals (either increased or decreased). This results in moderate changes to one or more of the following: fire size, intensity and severity, and landscape patterns. Vegetation attributes have been moderately altered from their historical range. Where appropriate, these areas may need moderate levels of restoration treatments, such as fire use and hand or mechanical treatments, to be restored to the historical fire regime.

Condition Class	Fire Regime Example Management Options
Condition Class 3	Fire regimes have been significantly altered from their historical range. The risk of losing key ecosystem components is high. Fire frequencies have departed from historical frequencies by multiple return intervals This results in dramatic changes to one or more of the following: fire size, intensity, severity, and landscape patterns. Vegetation attributes have been significantly altered from their historical range. Where appropriate, these areas may need high levels of restoration treatments, such as hand or mechanical treatments, before fire can be used to restore the historical fire regime.

Condition Classes for the NWCFMP area can be found in Table 9. A GIS produced map can be found in Appendix A.

Table 8: Condition Classes for NWCFMP Lands

Fire Regime Condition Class	Acres	Percent
Condition Class 1	915,461	11
Condition Class 2	6,319,804	77
Condition Class 3	840,418	10
Unclassified	134,319	2

Source: GIS Library – September 2004

Fire Regime and Condition Class will be reassessed in FY 2005 in order to be consistent with national direction set forth in the HFRA and specific direction outlined in the Fire Regime Condition Class Guidebook available at <http://www.frcc.gov/>

Values at Risk

Outlined in the descriptions of the FMU's/Polygons in general terms are the values at risk in the four FMUs. Specific guidance for each FMU/polygon can be found in Appendix B. A listing of Species of Special Concern can be found in Appendix C, page C-1.

Communities At Risk

The communities of Steamboat, Hahns Peak, Columbine, Hamilton, Maybell, and Elk Springs, are some of the other small communities and subdivisions listed in the Federal Register Notice: <http://fireplan.gov/>. There may be other communities at risk that are not listed in the Federal Register that may qualify as well. The NWCFMP area in cooperation with the Colorado State Forest Service is in the process of reviewing the 2001 Federal Register notice, and the listing of communities is being revised to ensure all communities meeting the definition of Communities at Risk found in the Federal Register are included.

Community fire plans have been completed for Grand, Rio Blanco, Routt, Jackson, and Moffat Counties and are on file at the Fire Center in Craig. Each plan contains action items for reducing fire hazards on both public and private land. The plans:

- ❑ Identify areas of highest priority for fuels-reduction treatments and ecological restoration in the wildland-urban interface.
- ❑ Outline steps for continuing public education regarding fire hazard reduction.
- ❑ Set priorities for S&PF monies to fire departments and volunteer fire departments by identifying equipment and training needs that enhance their capability and suggest funding/technical assistance strategies to help private property owners accelerate the creation of defensible space.

Development of Fire Management Objectives

As part of the planning process that identified the four distinct FMUs, the interdisciplinary teams developed desired fire management objectives for each area. While these management objectives focus on creating healthy landscapes, they also address in general terms the impact of fire on wildlife, livestock, and other resources. They also recognize that flora and fauna native to the NWCMP area evolved in an environment where fire played a major role. However, the absence of fire as the result of suppression activities has also had a role in shaping ecosystems and the life they support. To assess the desired role of fire in each polygon, consideration was given to the impact of fire itself, both the short-term and long-term beneficial and adverse effects of fire, as well as the impacts of a range of fire suppression actions, from full-suppression tactics to less aggressive strategies. Through this process it was determined that wildland fire can be used to protect, maintain, and enhance resources and, as nearly as possible, be allowed to function in its natural ecological role. The use of fire will be based on the guidance found in this fire management plan and will follow specific prescriptions contained in operational plans.

The resulting fire management objectives that came from this process mitigate potential negative impacts to resources from fire and fire suppression activities by establishing limitations on numbers of acres burned, burning seasons, and fire suppression actions. This plan ensures that fire, as a critical natural process, will be integrated into land and resource management plans and activities on a landscape scale, and across agency boundaries. Response to wildland fire is based on ecological, social and legal consequences of the fire. The circumstances under which a fire occurs, and the likely consequences on firefighter and public safety and welfare, natural and cultural resources, and values to be protected dictate the appropriate response to the fire.

Fire Management considerations common to all FMUs include:

- ❑ Firefighter and public safety is the first priority and all strategies will reflect this commitment. The protection of human life is the single, overriding suppression priority. Setting priorities within communities and community infrastructure, other property and improvements, and natural and cultural resources will be done based on the values to be protected, human health and safety, and the cost of protection. Once people have been committed to an incident, these human resources become the highest value to be protected.
- ❑ Fires will be suppressed at minimum costs, considering firefighter and public safety, benefits, and values to be protected, consistent with resource objectives.
- ❑ Protect heritage resources.
- ❑ Inform Heritage of any cultural resources encountered during suppression activities.

- ❑ Protect identified threatened and endangered species habitat, heritage sites, administrative sites, recreation sites and structures on public lands, and oil and gas wells and associated infrastructure.
- ❑ Consult appropriate resource specialists to ensure that resource management concerns are adequately addressed and that necessary mitigation of suppression activities occurs.
- ❑ Restrict aerial applications of foam or retardant within 300 feet of any body of water, including lakes, rivers, streams, and ponds. Exceptions can be made to protect life or property, firefighter safety, and when the potential damage to natural resources outweigh possible loss of aquatic life.
- ❑ All prescribed fire and fire use projects will consider the impacts of smoke on Class 1 Airsheds and non-attainment areas.
- ❑ Clean equipment used for suppression before arriving on-site and leaving to reduce spread of noxious weeds. Staging areas and fire camps should not be located on sites with noxious weed infestations.
- ❑ Rehabilitation and restoration efforts will be undertaken to protect and sustain ecosystems, public health and safety, and to help protect infrastructure.

Specific Fire Management Objectives and Strategies for each FMUs are outlined below:

Table 9: Values at Risk by Fire Management Unit

FIRE MANAGEMENT UNIT A
FMU A is composed of areas where wildland fire is not desired at all. This FMU includes areas where mitigation and suppression are required to prevent direct threats to life or property. FMU A may include areas where fire never played a large role historically in the development and maintenance of the ecosystem, where fire return intervals are very long, or because of human development, fire can no longer be tolerated without significant monetary loss.
Overview
Location: The polygons that make up this FMU are scattered throughout the NWCFMP area. A map showing the location of the polygons can be found in Appendix A, p. A-1 through A-10.
Characteristics: A general overview of the characteristics common to the NCFMP area are described in Section III C: FMU Description, p. 14. Specific characteristics for each polygon can be found in each of the polygon descriptions found in Appendix B.
Specific Fire Management Objectives: Specific fire management objectives for each polygon can be found in the polygon descriptions found in Appendix B.
Fire History: Fire suppression history for the NWCFMP has been documented in general terms in section III C. Tables 4 & 5 contain a summary of fire type by cause and size.
Fire Regime/Condition Class: Fire regime and condition class information has been described in general terms in this Chapter and are identified on maps in Appendix A.

Values at Risk: Scattered rural residences, developments and improvements (campgrounds, communication sites, guard stations), oil and gas facilities, mines and historical and archeological sites.
Communities at Risk: No communities at risk have been identified in this FMU
Fire Management Objectives
Fire Suppression Objectives: <ul style="list-style-type: none"> • All fires in this FMU will be aggressively suppressed. Ninety percent of fires at all Fire Intensity Levels (FIL) will be held to ¼ acre or less in order to protect key resource values. • Protect facilities and structures at campsites and interpretive sites, recreation sites, communications sites, heritage sites, a compressor station and oil and gas facilities, mine sites and cottonwood riparian areas from unwanted wildland fire.
Special Conditions that Result in Extreme Fire Behavior, Resistance to Control or Safety: Certain sites are located in areas with heavy fuel loading to the exterior of the polygon boundary.
Suppression Strategies: <ul style="list-style-type: none"> • Wildland fires occurring in this FMU will be aggressively suppressed. • MIST will be used whenever possible. • No dozers will be used within the perimeter of the polygon within 1/8th mile of known heritage sites, except to provide for firefighter or public safety.
Suppression and Constraints: Specific constraints for each polygon can be found in the Polygon descriptions found in Appendix B.
Wildland Fire Use: Wildland fire use for resource benefit is not an identified fire management option within this FMU.
Non-Fire Fuel Treatment Objectives: <ul style="list-style-type: none"> • One mechanical/spray treatment within the FMU annually to control cheatgrass. • Evaluate yearly to ensure that there are no accumulations of hazard fuels around oil and gas facilities on public lands; treat one site a year using mechanical means to treat accumulated fuels. • Mechanically treat vegetation to reduce or change condition class to lower level.
Post Fire Restoration/Rehabilitation: See Chapter IV E, p. 79.
Community Protection/Community Assistance Objectives: There are no communities at risk identified in this FMU.

FIRE MANAGEMENT UNIT B

FMU B is made up of polygons where wildland fire played a role in the function of the ecosystem but where unwanted wildland fire could have a negative effect without mitigation. Negative effects include risks to private lands, improvements in the wildland-urban interface, important heritage resources, critical habitat, areas with unnatural fuel buildup, and areas where a viable seed bank does not exist for natural reseeding.

Overview

Location: The polygons that make up this FMU are scattered throughout the NWCFMP area. A map showing the location of the polygons can be found in Appendix A, p. A-1 through A-10.

Characteristics: A general over view of the characteristics common to the NWCFMP area are described in Section III C: FMU Description, p. 14. Specific characteristics for each polygon can be found in each of the polygon descriptions found in Appendix B.

Fire Management Objectives:

General Objectives:

- Protect wildland interface, commercial timber, and municipal watersheds.
- Reduce the occurrence and impact of wildland fire to big game severe winter range, Sage grouse habitat, and potential lynx habitat.
- Improve critical wildlife habitat
- Reduce accumulations of hazardous fuels in the wildland-urban interface in order to protect life and property and provide for firefighter safety.

Specific Fire Management Objectives for each polygon can be found in the polygon descriptions found in Appendix B.

Fire History: Fire suppression history for the NWCFMP area has been documented in general terms in section III C. Tables 4 & 5 contain a summary of fire type by cause and size for each FMU.

Fire Regime/Condition Class: Fire regime and condition class information has been described in general terms in this chapter and are identified on maps in Appendix A.

Values at Risk:

Communities at risk, scattered rural residences and developments, commercial timber, watersheds, heritage sites, vegetative communities (Ponderosa pine, Mountain shrub, Cottonwood riparian areas, etc.) viewsheds, critical habitat, and oil and gas sites and associated facilities.

<p>Communities at Risk: The communities of Steamboat, Elk River Corridor, Steamboat Lake, Hahns Peak, Columbine, Stagecoach, Morrison Creek, Wilderness Ranch, Bakers Peak, Freeman, and Knez Divide as well as several others are listed in the Federal Register Notice: http://fireplan.gov/. There are others that are not listed in the Federal Register that may qualify as well. Efforts are underway to update the listing in the Federal Register.</p>
<p style="text-align: center;">Fire Management Objectives</p>
<p>Fire Suppression Objectives:</p> <ul style="list-style-type: none"> All fires in this FMU will be suppressed using appropriate management response to include perimeter control for occurrences at Planning/Preparedness Levels 1 and 2. At PPL 3 and above, the appropriate management strategy is direct control with the goal of suppressing 90% of all fires at 100 acres or less, depending on the polygon. Specific suppression targets are identified for each polygon.
<p>Fire and Fuels Mitigation Considerations: Emphasis should be focused on prevention and mitigation programs that reduce unplanned ignitions and threats to life, property, and natural and cultural resources.</p> <p>Use a combination of mechanical means and prescribed fire to reduce fuel loading around private land, in wildland-urban interface areas, and near oil and gas wells and associated facilities</p>
<p style="text-align: center;">Fire Management Strategies</p>
<p>Special Conditions that Result in Extreme Fire Behavior, Resistance to Control or Safety: Certain sites are located in areas with heavy fuel loading to the exterior of the polygon boundary. Insect and disease infestation and drought conditions through out the FMU have significantly increased the dead component. Examples include the Routt Divide blow down, Troublesome Creek, Flat Tops and Black Mountain.</p>
<p>Suppression Strategies:</p> <ul style="list-style-type: none"> Stage One Analysis will be used on all Wildland fires occurring in this FMU to determine the appropriate management response. In most cases a direct strategy will be employed at PPL 2 and above. Specific strategy options are discussed in the polygon descriptions in Appendices B. MIST will be used whenever possible. <p>No dozers will be used within 1/8th mile of known heritage sites, except to provide for firefighter or public safety.</p>
<p>Suppression and Constraints: Specific restraints for each polygon can be found in each Polygon description found in Appendix B.</p>
<p>Wildland Fire Use:</p> <ul style="list-style-type: none"> Fire Use is not an option with in FMU B. How ever long term strategies include the use of prescribed fire and other means to treat areas so that they could be moved into FMU C or FMU D.

Non-Fire Fuel Treatment Objectives: The implementation of non-fire fuels treatment (mechanical and chemical) may be considered as needed by a site-specific plan.

Post Fire Restoration/Rehabilitation:

- Monitor impacted areas for non-native species and reseed with native species if adequate seed bank does not exist and reseed as necessary.
- Monitor sites to determine that management objectives are being met and make adjustments as necessary.
- Through a program of monitoring and evaluation, reclassify polygons that can be identified as non-conditional, and move them to FMU C or FMU D.

For site-specific guidance see Chapter IV E, p. 79.

Community Protection/Community Assistance Objectives:

- Create agreements that will allow fire to cross from public to private lands and prepare rehabilitation plans prior to a fire event.
- Increase awareness in the community of the necessity of creating defensible space and reducing the likelihood of unwanted wildland fire.

FIRE MANAGEMENT UNIT C

FMU C is made up of polygons where fire is desired but where there may be social, political, or ecological constraints that must be considered. These constraints could include air quality considerations, threatened or endangered species considerations, or other habitat considerations (both spatial and temporal).

Overview

Location: The polygons that make up this FMU are scattered throughout the NWCFMP area. A map showing the location of the polygons can be found in Appendix A, pages A-1 through A-10.

Characteristics: A general over view of the characteristics common to the NCFMP area are described in Section III C: FMU Description, p. 14. Specific characteristics for each polygon can be found in each of the polygon descriptions found in Appendix B.

Fire Management Objectives:

General Objectives:

- Allow wildland fire to resume its role in the ecosystem through the use of the appropriate management response concept, conditional fire use, and prescribed fire.
- Use prescribed fire and mechanical and chemical means on a site specific basis to improve habitat and critical winter range for identified species using fuel treatments to improve the shrub age class diversity, and to enhance sage grouse habitat and potential lynx habitat.
- Provide the appropriate level of protection for oil and gas sites and associated facilities.
- Reduce accumulations of hazardous fuels in the wildland-urban interface in order to protect life and property and provide for firefighter safety.
- Provide protection for known heritage sites, scenic corridor and facilities, power lines, and other similar values.

Specific Fire Management Objectives for each polygon can be found in the polygon descriptions found in Appendix B.

Fire History: Fire suppression history for the NWCFMP area has been documented in general terms in section III C. Tables 4 & 5 contain a summary of fire type by cause and size for each FMU.

Fire Regime/Condition Class: Fire regime and condition class information has been described in general terms in this Chapter and are identified on maps in Appendix A.

Values at Risk:

- Communities at risk and scattered rural residences and developments
- Oil & gas sites and associated facilities
- Vegetative communities (Ponderosa pine, sagebrush and bitter brush communities, mountain shrub, cottonwood riparian areas, etc.)
- Big game winter range and Sage grouse and other critical habitat
- Heritage sites
- Scenic corridor and recreation trails/recreation structures and improvements

Communities at Risk:

The communities of Western Knolls Subdivision, Lay, Maybell, Graystone, and Hamilton as well as several others are listed in the Federal Register Notice: <http://fireplan.gov/>. There are others that are not listed in the Federal Register that may qualify as well. Efforts are underway to update the listing in the Federal Register.

Fire Management Objectives**Fire Suppression Objectives:**

- Wildland fire use, within prescriptive parameters, will be used to protect, maintain and enhance resources in certain C polygons (See polygon descriptions in Appendix B).
- All other fires in this FMU will be suppressed using appropriate management response with the goal of suppressing 85% of all fires at 300 acres or less, depending on the polygon. Specific suppression targets are identified for each polygon.
- Use the appropriate management response to manage all fires within one mile of the community of Greystone in a manner that limits the acreage to ¼ acres or less.
- A Stage One Analysis will be completed for all wildland fires in this FMU to determine the appropriate management response.
- Manage the number of acres burned or treated in certain polygons to the limits established for the polygon. These limits may be expressed in total acres and/or time of year.

Fire Mitigation Considerations: Emphasis should be focused on prevention and mitigation programs that reduce unplanned ignitions and threats to life, property, and natural and cultural resources.

Fire Management Strategies

Special Conditions that Result in Extreme Fire Behavior, Resistance to Control or Safety: Certain sites are located in areas with heavy fuel loading to the exterior of the polygon boundary. Insect and disease and drought conditions throughout the FMU have significantly increased the dead component.

Suppression Strategies:

- Wildland fires occurring in this FMU will be managed using the appropriate management response dictated by the Stage One Analysis. Primary strategies include direct, perimeter and prescriptive control.
- MIST will be used whenever possible.
- No dozers will be used within 1/8th mile of known heritage sites, except to provide for firefighter or public safety.

Suppression and Constraints: Specific restraints for each polygon can be found in each polygon description found in Appendix B.

Wildland Fire Use:

- Naturally occurring ignitions and prescribed fire will be used to improve site health and control build up of fuels.
- Use a combination of mechanical means and prescribed fire to reduce fuel loading around private land, in wildland-urban interface areas, and near oil and gas wells and associated facilities.
- Use a combination of mechanical means and prescribed fire to improve and maintain critical habitat.
- Use prescribed fire and other means to treat areas so that they could be moved into FMU C or FMU D.

Non-Fire Fuel Treatment Objectives: The implementation of non-fire fuels treatment (mechanical and chemical) may be considered as needed by a site-specific plan.

Post Fire Restoration/Rehabilitation:

- Monitor impacted areas for non-native species and reseed with native species if adequate seed bank does not exist and reseed as necessary.
- Monitor sites to determine that management objectives are being met and make adjustments as necessary.
- Through a program of fire use, fuels mitigation, monitoring and evaluation, reclassify polygons as appropriate to FMU D.

For site-specific guidance see Chapter IV E, p. 79.

Community Protection/Community Assistance Objectives:

- Create agreements that will allow fire to cross from public to private lands and prepare rehabilitation plans prior to a fire event.
- Increase awareness in the community of the necessity of creating defensible space reducing the impacts of unwanted wildland fire.

FIRE MANAGEMENT UNIT D

FMU D is made up of polygons where fire is allowed to perform its natural function and there are few to no constraints to its use. These areas offer the greatest opportunity to take advantage of the full range of options available to the resource manager for managing fire under appropriate management response.

Overview

Location: The polygons that make up this FMU are scattered throughout the NWCFMP area. A map showing the location of the polygons can be found in Appendix A, pages A-1 through A-10.

Characteristics: A general overview of the characteristics common to the NWCFMP area are described in Section III C: FMU Description, p. 14. Specific characteristics for each polygon can be found in each of the polygon descriptions found in Appendix B.

Fire Management Objectives:

General Objectives:

- Wildland fire will be used to protect, maintain, and enhance resources and, as nearly as possible, be allowed to function in its natural ecological role. The use of fire is based on an approved fire management plan and will follow specific prescriptions contained in operational plans (Appendix B).
- Use wildland fire to create a mosaic of vegetative age classes in all plant communities.
- Provide the appropriate level of protection for values at risk that may include: oil and gas sites and associated facilities, private property, known heritage sites, scenic corridors and facilities, power lines, and other similar values.

Specific Fire Management Objectives for each polygon can be found in the polygon descriptions found in Appendix B.

Fire History: Fire suppression history for the NWCFMP area has been documented in general terms in section III C. Tables 4 & 5 contain a summary of fire type by cause and size for each FMU.

Fire Regime/Condition Class: Fire regime and condition class information has been described in general terms in this chapter and are identified on maps in Appendix A.

Values at Risk:

- Scattered rural residences and developments
- Primary and secondary dwellings/Urban interface
- Scenic corridor and recreation trails/r NWCFMP area recreation structures and improvements

Communities at Risk:

The community of Elk Springs is listed in the Federal Register Notice: <http://fireplan.gov/>. There may be others that are not listed in the Federal Register that may qualify as well. Efforts are underway to update the listing in the Federal Register.

Fire Management Objectives**Fire Suppression Objectives:**

- A Stage One Analysis will be completed for all wildland fires in this FMU to determine the appropriate management response.
- Use established limits on the number of acres burned as defined for a specific polygon to achieve a mosaic of age classes and vegetation diversity.
- Specific treatment targets and restrictions are identified for each polygon.
- Protect identified values at risk.

Fire Mitigation Considerations: Emphasis should be focused on prevention and mitigation programs that reduce unplanned ignitions and threats to life, property, and natural and cultural resources.

Fire Management Strategies

Special Conditions that Result in Extreme Fire Behavior, Resistance to Control or Safety: Certain sites are located in areas with heavy fuel loading. Insect and disease infestation and drought conditions through out this FMU have significantly increased the dead component.

Suppression Strategies:

- Wildland fires occurring in this FMU will be managed using the appropriate management response dictated by the Stage One Analysis and in consideration of the prescriptive parameters as defined in the individual polygons (see Appendix B).
- MIST will be used whenever possible.
- Restrict use of retardant in the various ACEC, wilderness areas and WSAs unless approved by the appropriate Agency Administrator.

Suppression and Constraints: Specific restraints for each polygon can be found in each polygon description found in Appendix B.

Wildland Fire Use:

- Use naturally ignited wildland fires and prescribed fire to improve and maintain critical habitat.

Non-Fire Fuel Treatment Objectives: The implementation of non-fire fuels treatment (mechanical and chemical) may be considered as needed by a site-specific plan. One treatment for 250 acres annually.

Post Fire Restoration/Rehabilitation:

- Monitor impacted areas for non-native species and reseed with native species if adequate seed bank does not exist and reseed as provided for in a rehabilitation plan.
- Monitor sites to determine that management objectives are being met and make adjustments as necessary.

For site-specific guidance see Chapter IV E.

Community Protection/Community Assistance Objectives:

- Create agreements that will allow fire to cross from public to private lands and prepare rehabilitation plans prior to a fire event.
- Increase awareness in the community of the necessity of creating defensible space and reducing the likelihood of unwanted wildland fire.